

IN THE CLAIMS

Claims 1-4 (Cancelled).

5. (Currently Amended) The current reference circuit of claim 4~~21~~ further comprising a resistive element and wherein:

the first NFET includes a source that is grounded; and

the second NFET includes a source that is coupled to ground via the resistive element.

6. (Original) The current reference circuit of claim 5 further comprising:

a first p-channel field effect transistor (PFET) having:

a gate;

a drain coupled to the drain of the first NFET; and

a source adapted to couple to a supply voltage; and

a second PFET having:

a gate coupled to the gate of the first PFET;

a drain coupled to the gate of the second PFET and the drain of the second NFET; and

a source adapted to couple to the supply voltage.

7. (Original) The current reference circuit of claim 5 wherein the supply voltage comprises a voltage of about 0.5 volts.

8. (Original) The current reference circuit of claim 5 further comprising:

a third NFET having:

a gate and a drain that are coupled together; and

a source coupled to the drain of the first NFET; and

a fourth NFET having:

a gate coupled to the gate of the third NFET; and

a source coupled to the gate of the fourth NFET and the drain of the second NFET.

9. (Original) The current reference circuit of claim 8 wherein the fourth NFET includes a drain and further comprising:

a first PFET having:

a gate; and

a drain coupled to the drain of the third NFET; and

a second PFET having:

a gate coupled to the gate of the first PFET; and

a drain coupled to the gate of the second PFET and the drain of the fourth NFET.

10. (Original) The current reference circuit of claim 9 wherein the first PFET and the second PFET each include a source and further comprising:

a third PFET having:

a gate;

a drain coupled to the source of the first PFET; and
a source adapted to couple to a supply voltage; and
a fourth PFET having:
a gate coupled to the gate of the third PFET;
a drain coupled to the gate of fourth PFET and the source of the second
PFET; and
a source adapted to couple to the supply voltage.

11. (Original) The current reference circuit of claim 10 wherein the supply voltage comprises a voltage of about 3.3 volts.

Claims 12-20 are Cancelled.

Please add the following new claims:

21. (New) A current reference circuit comprising:

a first n-channel field effect transistor (NFET) having a gate and drain coupled together, and a body that is grounded; and
a second NFET having a floating body and a gate coupled to the gate of the first NFET.

22. (New) The current reference circuit of claim 21 wherein the first and second NFETs are silicon-on-insulator transistors.